



LIVING PUBLIC SPACE

Urban Stormwater Management and Human Networks

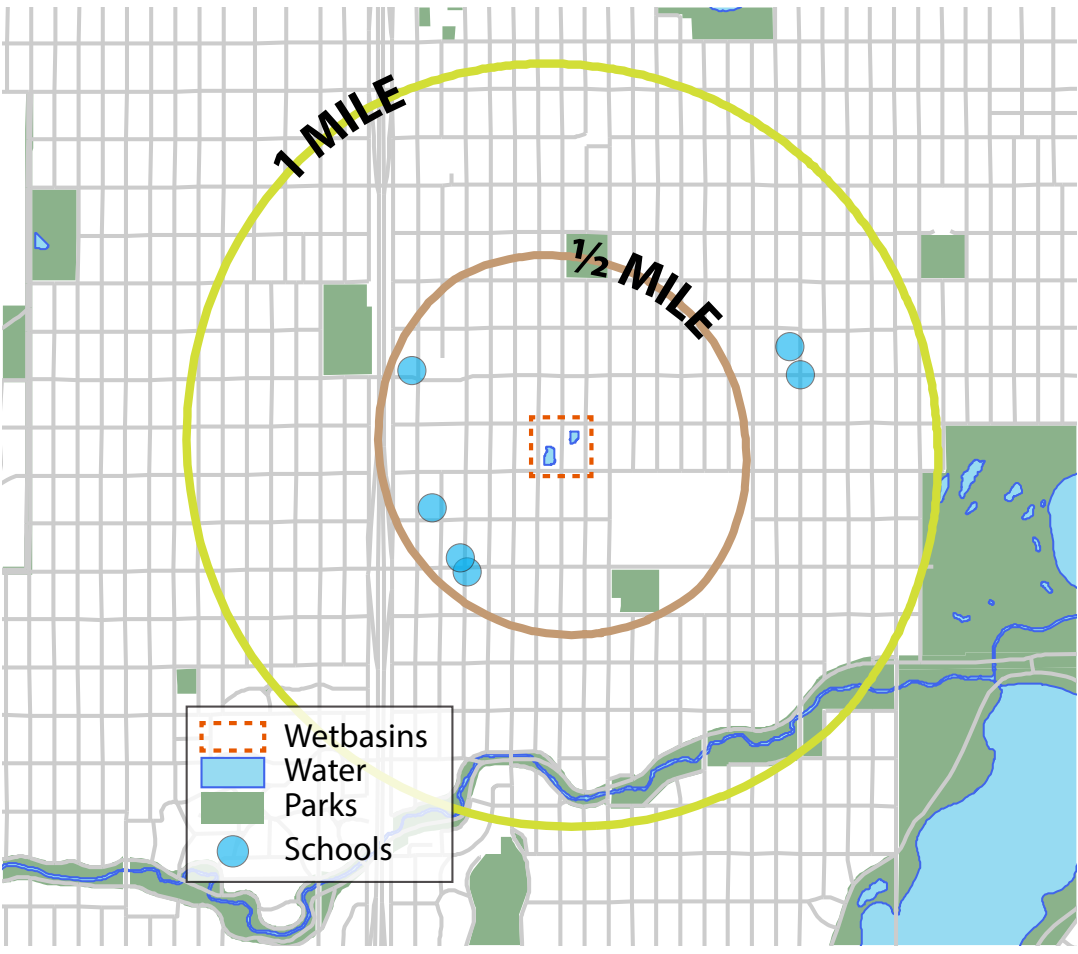
FRAMING THE PROJECT

Cities across the United States are working to create **vibrant public spaces** while promoting **environmental health**. Multifunctional character of urban parks makes them efficient and enjoyable for residents. However, in the Regina Neighborhood of South Minneapolis, a pair of wet basins is serving as solely utilitarian infrastructure. They are not used as a recreational or social space despite their stimulating aesthetic character and proximity to numerous homes and schools. Using lessons from case studies and social theory, I have worked to develop a design framework to better **connect the urban water system with the human network** of the Regina neighborhood. With community support, the ideas generated from this project can be applied to open spaces in any number of cities, regardless of size or available funding.

APPLICATIONS FOR MINNEAPOLIS THE SITE

- Located at 43rd Street and Park Avenue in South Minneapolis
- Near numerous schools and a few parks
- Near Chicago Avenue businesses
- Marshy soil and wetland characteristics
- Near Minnehaha Creek

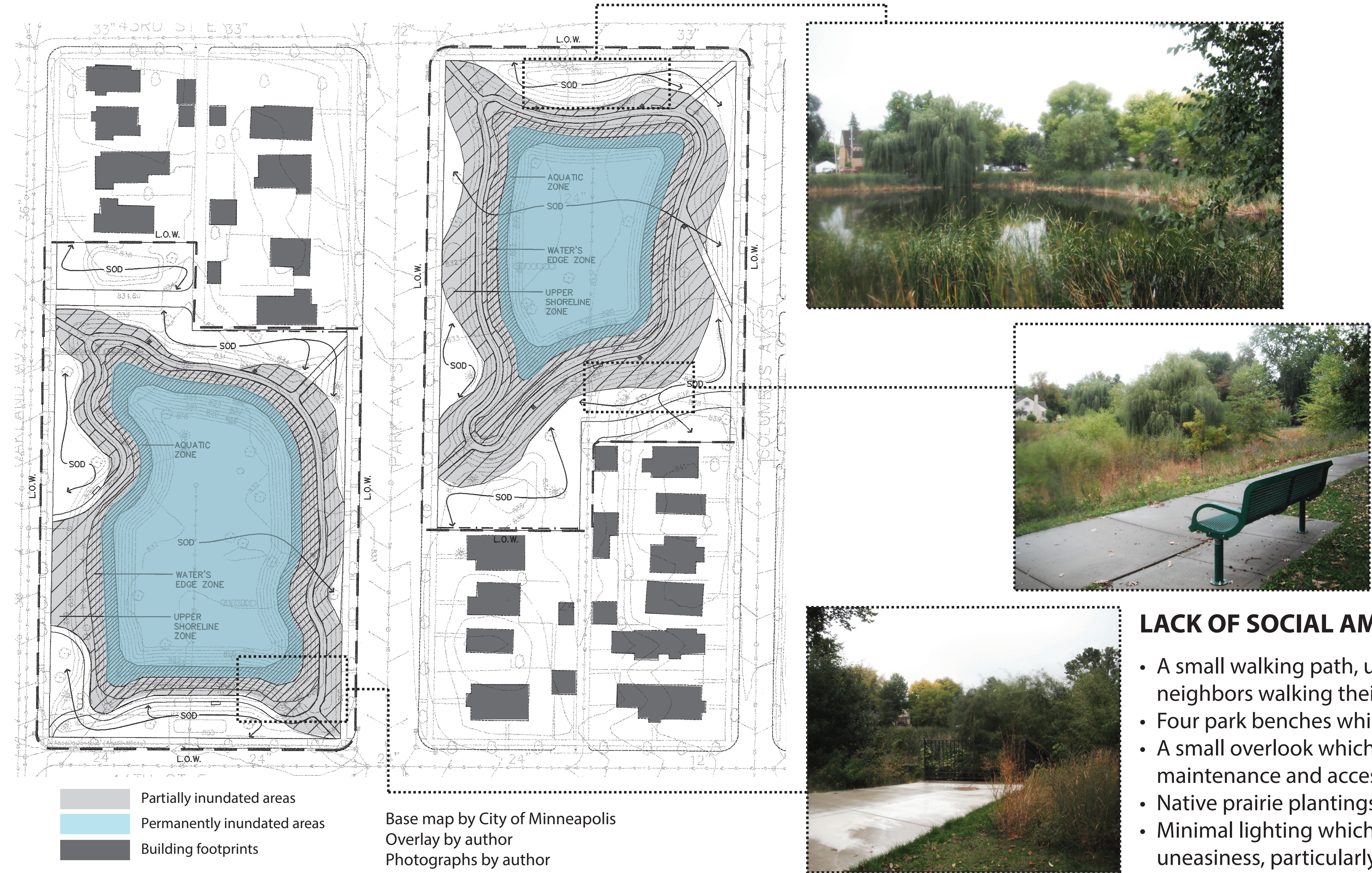
Map by author with data from City of Minneapolis



HISTORY

- 1930s-50s:**
With the development of the neighborhood, household flooding became a major problem
- 1997:**
The City of Minneapolis designated the area as a vulnerable flooding zone
- 2003:**
The City of Minneapolis Department of Public Works constructed two wet basins to retain water in storm events and clean water before it enters Minnehaha Creek

TODAY: THE SITE



LACK OF SOCIAL AMENITIES

- A small walking path, usually used by neighbors walking their dogs
- Four park benches which are rarely used
- A small overlook which is primarily maintenance and access to the basin
- Native prairie plantings
- Minimal lighting which leads to uneasiness, particularly at night

ANALYSIS

CASE STUDY: ANN ARBOR, MI



Photograph by Landscape Architecture Foundation

ANN ARBOR MUNICIPAL CENTER
The Municipal Center was constructed in 2011 with LEED Gold certification. In order to achieve this goal, much of the landscape is dedicated to water management. The landscaping also includes social and recreational features such as picnic tables, a fountain, public art and a pedestrian bridge spanning the rain gardens. The City conducted a survey of 120 citizens and Center employees to determine the success of the landscaping. 77% of participants responded that they use the outdoor space "occasionally or more often".

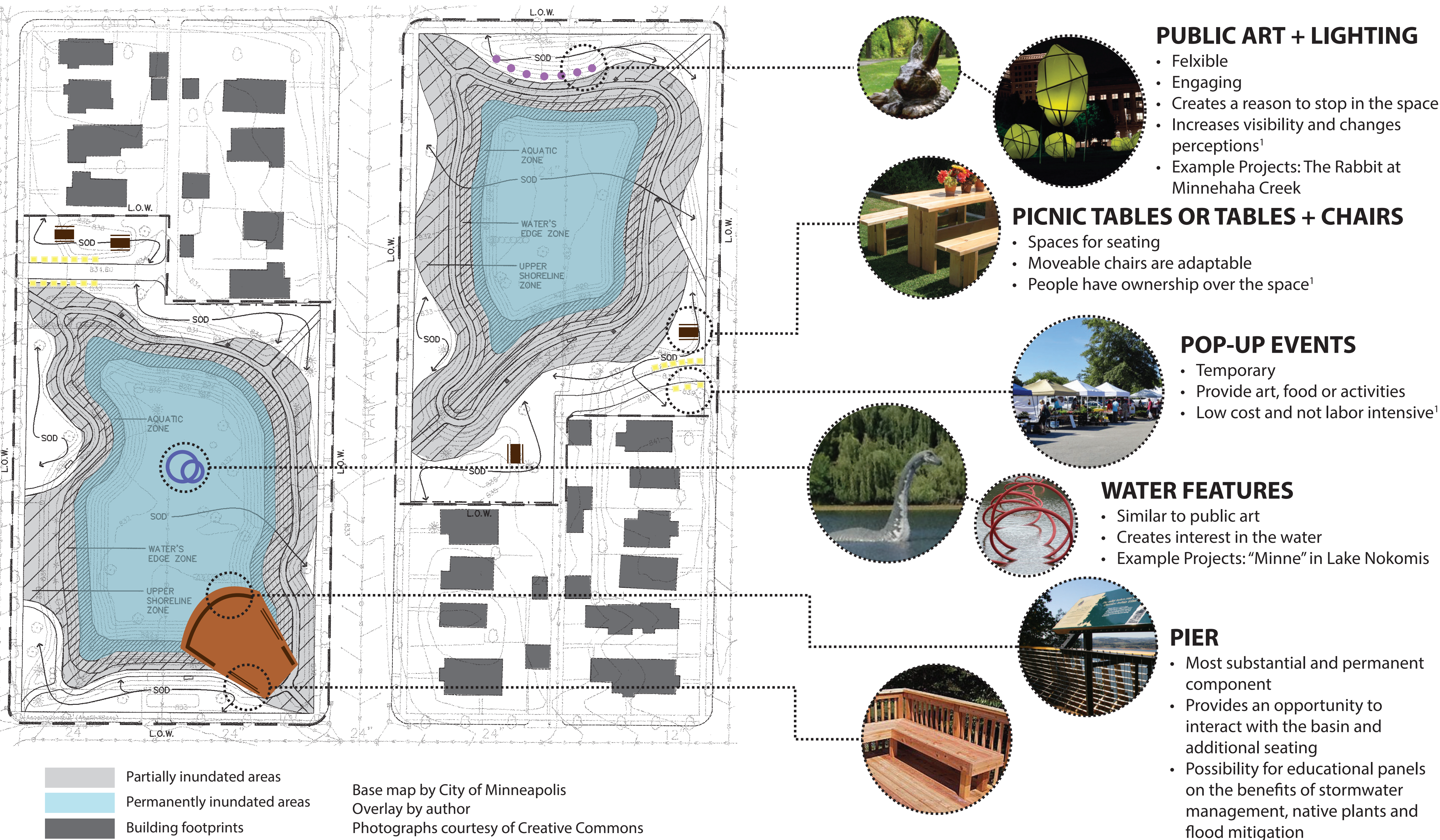
STAKEHOLDERS

GOVERNMENT	COMMUNITY	PRIVATE SECTOR
<ul style="list-style-type: none">• Minneapolis' Ward 8• Minnehaha Creek Watershed District• City of Minneapolis• Metropolitan Council• State of Minnesota• Federal Government	<ul style="list-style-type: none">• Homeowners• Neighborhood Schools• Field and Regina Neighborhood	<ul style="list-style-type: none">• Local Businesses• Large Corporations• Institutions

SWOT ANALYSIS

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none">• The creation of social public space• Health benefits of parks• Environmental Human• Connecting residents to nature• Multifunctional green space• Stormwater management• Recreational areas	<ul style="list-style-type: none">• Community apathy and lack of public involvement• Financialandsocialcostsassociated with a long participation and design process• Potential environmental impacts• High up-front costs• Challenges in measuring success
OPPORTUNITIES	THREATS
<ul style="list-style-type: none">• Educate neighbors about stormwater management and green infrastructure• Provide volunteer opportunities• Long term community investment, cohesion and placemaking• Increase in nearby property values	<ul style="list-style-type: none">• Future funding streams• Maintenance costs for government• Perception of safety in the area• Proximity to water (safety and utility of basins)• Attacks from NIMBYs• Potential lack of community interest

TOMORROW: A MORE ENGAGING ENVIRONMENT



PUBLIC ART + LIGHTING

- Flexible
- Engaging
- Creates a reason to stop in the space
- Increases visibility and changes perceptions!
- Example Projects: The Rabbit at Minnehaha Creek

PICNIC TABLES OR TABLES + CHAIRS

- Spaces for seating
- Moveable chairs are adaptable
- People have ownership over the space!

POP-UP EVENTS

- Temporary
- Provide art, food or activities
- Low cost and not labor intensive!

WATER FEATURES

- Similar to public art
- Creates interest in the water
- Example Projects: "Minne" in Lake Nokomis

PIER

- Most substantial and permanent component
- Provides an opportunity to interact with the basin and additional seating
- Possibility for educational panels on the benefits of stormwater management, native plants and flood mitigation

STRATEGIES

By engaging with the community to develop a set of strategies and design features, Minneapolis' Department of Parks and Recreation can work to create an environment around the stormwater retention ponds at 43rd Street and Park Avenue that is more **engaging** and **useable** for neighborhood residents. Because the system is **flexible** and **community driven**, it is very possible to replicate and scale up or down. In small communities with limited space or resources, very temporary projects can be implemented. In areas with increased open space and invested stakeholders, larger scale projects can be implemented. By allowing the community to take ownership of open space, cities will be able to **create distinct places** that serve the environment and its residents.